

## Weekly report (2012.8.13~8.19)

### Done

- 1) Fixed the bug mentioned in the last report, result is shown below. The result shows that the new implementation is better, and it has about 4.5 times speedup.

	Step1:split	Step2:render	Prev implementation
Instance Number	3600Map 100Reduce	100Map	3600Map 100Reduce
MapCostTime	9m5s	3m42s	35m50s
Max MapTime	11s	3m6s	1m18s
ReduceCostTime	4m24s	11s	41m35s
Max ReduceTime	2m58s	1s	34m2s
Total Time	13m36s	3m59s	1h17m32s

As we can see, the two map-reduce can reduce into one and can be even faster. But cause there occurred some problem with the experiment cluster, this work is delayed.

- 2) As to the Meteorology Project, it also need the basic rasterize work. I tried to conclude from my experience in parallel rendering and add some new method such as Bresenham algorithm to make a better rasterize implementation.

### To Do Next and Next Next Week

- 1) Merge the two steps mentioned above into one.
- 2) Finish a better rasterize implementation.
- 3) Try the boeing 777 data from Prof. Zhang, to see how the parallel rendering works.